/889 cont./

589 idary told me this on the remembered case of her friends who had been dead for a long time (5). This urge of the sexes toward

> 5. Bove (p)137 is probably referring to this when he says. "The desire for a man is felt early among [the women], and the interference of the mission in these circumstances is regarded as the greatest tyranny of civilization."

each other is natural.

•892 For the last three decades an unnatural disturbance of the equilibrium has predominated among the Indian population because there are not enough girls for the number of boys of marriageable age. When, on my second journey, I took leave of the Yamana in Punta Remolino, Hermenegildo joined me on my ride to Rio Cameron in the northeastern part of Isla Grande. His mother was a Selk'nam. He hoped to find a partner among this tribe, and on the way he repeatedly and longingly confessed this to me. I very clearly recognized his ardent desire. He stayed behind in the camp at Rio del Fuego where he had his eye on two girls who apparently understood and responded to his intentions. I did not wish to spoil his favorable prospects, and so I rode on alone (6).

> 6. See further details in Gusinde (b):154.

On various occasions I was told by several thoughtful older people: "How difficult the present situation is for many boys, because there are no suitable girls for marriage!" These words expressed a deep sympathy for a natural but unfulfilled desire. Truly, there is great tumult and agitation in the heart of a marriageable Fuegian until he completely possesses his beloved!

893 If we wish to establish a definite age in numbers, we need not resort to mere guesses. According to the missionaries and a few well-informed Indians, the average young man marries between the ages of 17 and 19, a weakling somewhat later. It is required -- and the boy's nearest relatives talk to him in this

/Title cont./

[illegible] two young people to not entered much earlier and that they do not assure themselves together as often as they have an opportunity, until finally none of the adults has any valid objections to their marriage.

2. Courtship of Marriageable Persons

[illegible] Contrary to the inaccurate and false reports from the pens of several Europeans, we should like to emphasize strongly the freedom of choice in the selection of a mate. As has just been said, it is only in most recent times that there has been an imbalance in the numerical proportion of the two sexes. According to the general statements of several Fuegians whom I questioned, there were formerly exactly as many young men as girls of marriageable age (5). Assuming this, all the conditions for an

> 5. Bridges (b) [illegible] definitely emphasizes that "the number of men and women is nearly equal" /translated from Spanish/. Nowadays it is probably impossible to determine whether the number of men or of women somewhat predominated, the few indications that I found point in favor of the latter. In June, 1884, when Bridges took an accurate census and the Mission Scientifique likewise determined the number of persons in the southern group, devastating diseases had already disturbed the equilibrium. We must take this into account in comparing these numbers. Compare Martial 215.

unhindered, free courtship of youthful lovers during the previous centuries seem fulfilled.

[illegible] The natural shyness and reserve characteristic of the female population in Tierra del Fuego, more pronounced than elsewhere, explain why the young man makes the first advances in courtship. The girl probably never begins it. Usually the two know each other from earliest youth or late childhood. Individual families of the same dialect group meet occasionally, stay together a few

[illegible]

[illegible] sexes. As a result the Yamana have the idea that sterility in marriage is solely attributable to the woman, whom they call a [illegible]. Thus they cannot have [illegible] is not [illegible] completely un-

> 162. The unreliability of what Hahn (p).005 maintains a division. "Sterility is very common in both sexes, according to Mr. Bridges, who attributes it to the proximity and to abuse of sexual relations" /translated from French/.

known, and they pity the woman who is forever denied the blessing of children. My impression agrees with Hahn (p).005 that "spontaneous abortion is very rare" /translated from French/. It happens almost always as a result of great physical exertion or very great shock.

According to all the observations that we know of, the sexes are somewhat unevenly distributed in favor of girls among the Yamana. The venerable John Lawrence assured me of this, and in Hyades (q):190 we read: "In our observations we have also established a slight predominance of girls over boys" /translated from French/. A census taken by Bridges in 1886 (p. 224 /untranslated, but the figures referred to are given in English/) showed that among 1,000 natives there were only 277 men as against 316 women.

In the tribe of Fuegians twins are just as rare as among the neighboring Selk'nam (Vol. I, 286). From former times I am familiar with only the one definite report that "Jemmy Button's eldest daughter has two beautiful twin children about four months old" /cited in English/ (Mém.Soc.Géog.1877). Later Hyades (q):190 mentions a woman 45 years old among whose ten children there was a pair of twin brothers. Finally, Steinberg (s):57 maintained: "I have a photograph of a Yahgan woman with twins, who are regarded as an extraordinary event" /translated from Spanish/. Were these witnesses really reliably informed? At any rate a twin birth is an extraordinarily rare phenomenon.

There are no accurate observations about the menopause, the time when menstruation ultimately ceases. Bridges and Hyades (q):189 observed pregnancy among women who were already 45 years old. Hence Fuegian women conceive until relatively late

3: Lothrop E-5 (1924-1925) 1928
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Yahgan family, but Martial (p. 215) assures us that six individuals was the average seen in more than 200 canoes. More specifically he states that 388 people of all ages were counted in 65 canoes, which results in an average of 5.97.

How much shore-line did an average family need to keep it supplied with mussels, conchs, limpets, crabs, fish, and sea urchins? Let us assume that they required from a third to two-thirds of a mile. This does not seem unreasonable when we recall that meat and vegetal foods also formed part of their diet. This would mean that around Thouctof, Harberton, Varela, Imiwaia, and Cambaceres bay on the average there stood 12 to 24 wigwams, containing 24 to 48 families, or 144 to 288 individuals of all ages. Furthermore, from one to two percent. of the house-sites would always be occupied at any given moment. That house-sites were tabooed where death had occurred would not affect this calculation over many years, because these places were reoccupied when the deceased had been forgotten.

A means of checking this broad estimate of the population exists in the census of the Yahgan[1] made by Rev. Thomas Bridges. The figures he gives are:

Navarin island	237
Hoste island	258
Tierra del Fuego (south coast)	218
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Wollaston and Hermite islands	65
Gordon island	36
Cuguswaiut (Londonderry?) island	20
Other western islands	60

From this table it appears that in 1883 there were 218 Yahgan on the south coast of Tierra del Fuego between Spaniard harbor and Brecknock peninsula. This figure represents a much reduced population, and it must be multiplied by 3 + to determine the population in the days when the whole tribe numbered 3000. We thus find that the total population of this area exceeded 654. As the western part of Beagle channel is precipitous and pierced by glaciers, most of the inhabitants lived east of Yendegaia bay, and in fact centered on Ushuaia and Harberton. Hence the assumed population of 144 to 288 for the Harberton and adjacent bays means that between twenty-two and forty-four percent. of the

[1] Published in the *South American Missionary Magazine* for 1884, p. 224.

3: Lothrop E-5 (1924-1925) 1928
Stitt Yahgan Stitt

total population of the south coast of Tierra del Fuego resided there. The true figure probably falls between these limits, so we may continue to assume that the average population of Varela, Harberton, Thouar'd, Cambaceres, and Isla Navia bays was between 144 and 288 individuals.

To measure the volume of shellheaps accurately would be an endless task. However, the average house-pit with its adjacent shore of débris, on the basis of exact measurements, covers approximately 370 square feet. The average depth of deposit runs about two feet, so that each house-pit accounts for 1140 cubic feet of rubbish, and the 1215 house-pits on Thouar'd, Harberton, Varela, and Isla Navia bays represent 1,385,100 cubic feet of deposited material.

In order to find the daily rate of deposit, Nelson assumed that each individual ate fifty shellfish a day. By trial he proved that 2000 shells, the daily allotment of 100 people, can be packed into 1200 cubic inches which may be raised to a cubic foot when ash, earth, and animal bones are added. These figures were worked out for California Indians, but we believe that they also will apply to the Yahgan, for if they ate less vegetal food they ate more meat, which would not greatly change the proportion of rubbish.

We may now state our problem and its answer succinctly as follows:

(a) Probable number of inhabitants: 144 to 288.
(b) Total contents of shellheaps: 1,385,100 cubic feet.
(c) Probable rate of deposit: 1.4 to 2.9 cubic feet per day.
(d) Number of years sites were inhabited: 1300 to 2600 years.

In criticism of the age deduced for the shellheaps we may point out that while no factor—even the number of heaps in the area discussed and the number of house-pits in those visited—is certain, nevertheless there is no reason that the errors should be cumulative. At any rate, the application of Nelson's method to Tierra del Fuego shows that it has been settled a very long time. To the writer it seems that the larger limit selected for the population is too great, and that the bulk of the shellheaps might well be considerably greater than estimated, because the assumed depth is certainly a very conservative figure.

In view of these figures and the other criteria for age already adduced, it seems not unwarranted to believe that the south coast of Tierra del Fuego has been occupied for 2000 years at least.

/611 cont./

• 174 in the abundant middens of the Magellanic archipelagos are urgently needed and may furnish us with important information on the past of the natives" /cited in English/. Furlong (r):178 entertains the same hopes.

carried out in the Fuegian refuse-layers to bring to light a number of finds that differ from those already known? In my opinion there is no prospect of this. The seaward wall of the individual shell mounds has actually been washed down by the waves to the water line, and unfamiliar forms of implements have not appeared. If possibly we might assume a lifting of the land (p. 344), it would be an absurdity to suppose that the customary dwellings were placed so close to the water line below sea level, and that gradually a wall of mussel shells had been built up around them.

Those strata which today are at the bottom of the mighty shell heaps were laid down many centuries ago. The implements they cover are similar to those used among our Indians up to the present time. No proof of a population preceding the Yamana, with a different form of culture and way of life has hitherto been discovered in the Beagle Channel area, nor can we expect it from further investigations there.

H. The Nomadic Life

182 The home of the Yamana is bleak and unfriendly, nature behaves wildly and brutally, and serious dangers threaten every Indian family who, in their frail canoe, cross the fragmented island realm. Nevertheless, not everything here is bad and disadvantageous; /612/ there are a few benefits and compensations. Weather conditions are anything but good, it is true, but at least the temperature is somewhat uniform, and the cool summer is matched by a cooler winter. Here, too, the inexhaustible sea pours out its bounty, so that the Indians can comfortably provide for their sustenance throughout the entire year. Concerning the food supply the Yamana are far more favorably situated than the neighboring Selk'nam. There are a few differences within our tribe, however, insofar as the families on the southern coasts are considerably

3: Lothrop E-5 (1924-1925) 1928
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type, because several other specimens have been published by Bove (1883) and Hyades (1891). The general shape of these points is similar to that of modern Ona arrowpoints and ancient stone points from eastern Tierra del Fuego. Yahgan workmanship, on the whole, is cruder than Ona, and to the writer's knowledge no points have been found on the south coast equal to the delicate blade illustrated in fig. 40.

4. HAMMERSTONES, ANVILS, GREASE STONES.—Every Yahgan family carried an oval water-worn stone which was used for a variety of purposes, such as hammering. These stones (fig. 70) may be picked up at every ancient camp-site.

5. BONE TOOLS.—Bone tools of modern type sometimes are found in shellheaps under conditions implying considerable antiquity.

AGE OF ARCHEOLOGICAL REMAINS

The age of the archeological remains on Beagle channel is a problem that has intrigued the writer from the moment of his arrival there, and every effort was made to collect data for its solution. It should be frankly stated at the outset of this discussion that there is no exact answer, but it is nevertheless possible to deduce an approximate figure. There are several methods by which the problem may be attacked; thus we shall discuss (1) the variations in Yahgan speech, (2) known historical movements in other parts of South America, (3) the internal evidence of age in Fuegian shellheaps, and finally (4) their probable rate of accumulation.

1. ANTIQUITY OF THE YAHGAN DIALECTS

As explained above, the Yahgan spoke five distinct though mutually intelligible dialects. This is rather surprising because (*a*) they were a roving people occupying only a small territory, (*b*) they were exogamous, and (*c*) the total population was only about 3000 individuals. Assuming, as seems probable, that the Yahgan reached Tierra del Fuego more or less as a unit speaking a single tongue, how long did it take them to modify their language in five distinct ways?

In the more civilized parts of the world linguistic change also has taken place, and, because language is not only spoken but written, the archaic forms are preserved and can be studied. For instance, the breaking up of Latin into the modern Romance

3: Lothrop E-5 (1924-1925) 1928
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languages, mutually intelligible only to a very slight extent, can be observed and checked in various stages. In this instance the Latin tongue was grafted on the native speech of various conquered peoples, who undoubtedly pronounced it from the beginning with local flavor so that the separation into dialects began at the outset, its course being retarded by the educated classes. Latin, however, was spoken over a very wide area with relatively poor communications, hence there existed every facility for rapid linguistic change.

The contrast between this condition and that of the Yahgan is obvious. We should not expect the Yahgan dialects to differ nearly so much in a given time as the Romance tongues. In fact, granted the circumstance, it is surprising that there were any Yahgan dialects at all. The very presence of these Yahgan dialects shows that the tribe had remained stationary as a whole for a great many centuries at least.

2. CULTURAL AND HISTORICAL EVIDENCE

The Yahgan are the southernmost unit of a group of primitive fisherfolk who at various times have lived on the west coast of South America. In southern Peru this fishing population was displaced by the rise of the typically Peruvian agriculturists who later built the great structures seen in ruins today on that coast. While there is yet no exact chronology for Peruvian archeology, the two leading authorities, Tello[1] and Uhle,[2] agree that this event must have materialized at least 2000 years ago in order to explain the known stratigraphy of Peruvian remains.

It is a far cry from Peru to Tierra del Fuego, but in the displacement of the Peruvian coastal population there is an ostensible cause for the general shunting to the south of all the coastal peoples. If, as we shall presently show, Fuegian camp-sites give evidence of occupancy at that remote period, then we may at least tentatively consider that the displacement of the Peruvian fisherman and the settlement of Fuegia are correlated, because this change of population in Peru is the only remote migration in South America which archeology has definitely yielded to the realm of history.

In Chile there seems to have taken place a similar displacement of the early population by the Araucanian tribes. Stratigraphical

[1] Julio C. Tello, Introducción á la Historia Antigua del Peru, Lima, 1922.
[2] Max Uhle, Los Principios de las Antiguas Civilizaciones Peruanas; *Boletin de la Sociedad Ecuatoriana de Estudios Historicos Americanos*, IV, no. 12, Quito, 1920.

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

174 studies clearly prove this. Cooper (1917a) has pointed out the general resemblance of the earlier culture at such sites as Taltal with the historic culture of the Magellanic archipelago. He lists as features shared in common with the Canoe Indians: the use of spear and harpoon, and disuse of the bow, nets, coiled basketry, combs, shell necklaces, and supine burial. To this should be added the strikingly close resemblance in physical type. Granted this relationship, however, we lack sufficient evidence to translate it into historical terms, for we cannot say how long ago the Araucanians displaced the earlier culture. Possibly the change in population in coastal Peru pushed the Yahgan into Tierra del Fuego, while a later shift on the coast of Chile may have been responsible for the presence of the Alacaluf; but this is mere conjecture.

3. INTERNAL EVIDENCE OF AGE IN FUEGIAN SHELLHEAPS

172 For several reasons an inspection of Beagle channel shellheaps leads to the conclusion that they mark camp-sites inhabited for many centuries. We list these reasons as follows:

A. *Bulk.*—The first and most obvious sign of age is the very size of the refuse-heaps. Clearly it must have taken a great many centuries to deposit such vast masses of débris. Below we have attempted to calculate the cubic contents of the refuse near Harberton.

B. *Breccia.*—The formation of breccia in the lower levels of middens, to the writer is not a positive criterion of great age, because so little is understood of the reasons which cause shells to unite in a solid mass. If some climatic change of temporary nature caused the formation of hard floors at one time in all shellheaps, then a valuable means of determining relative age would be available, because the depth of the breccia varies.

C. *Trees.*—In one instance, shellmound 51 in fig. 98, large trees were found growing on top of an ancient camp-site. This midden was discovered on the afternoon before our departure for the north, so that there was no opportunity for cutting down a tree to count the rings and thus learn how long ago the site was abandoned. The site is a small one, with only eight house-pits situated at the base of a steep slope rising sharply from the beach.

D. *Land Subsidence.*—Many instances of the undercutting of the base of middens on both shores of Beagle channel (as can be seen

3: Lothrop E-5 (1924-1925) 1928
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in pl. XVI) seem to indicate slight submergence of the land since the first settlement. This conclusion is not in agreement with that of Lovisato (1885), who believes that the Elizabeth Island shellheaps have been elevated several meters. N. O. G. Nordenskjöld concludes that Tierra del Fuego has risen about sixty meters since relieved from the pressure of general glaciation. The slight and recent submergence noted by the present writer may be a local adjustment since the general rising of the land.

E. *Animal Bones.*—Considerable age may be argued from the presence of badly rotted animal bones in a Harberton shellheap. In general this is an almost worthless criterion of age, but in Tierra del Fuego, where the frost scarcely leaves the ground, all animal remains tend to be preserved. The body of a sailor buried in the South Shetland islands was exhumed after several years with the flesh in perfect preservation,[1] so that Beagle channel is only 400 miles from land where animal remains do not decay at all.

4. RATE OF ACCUMULATION OF REFUSE-HEAPS

Mr. N. C. Nelson [2] has most ingeniously worked out the probable age of California shellheaps by determining three factors: (*a*) the total former population, (*b*) the bulk of the débris, and (*c*) the probable daily rate of deposit. While lacking the concrete data to apply this method of determining age as accurately as has Nelson, nevertheless we shall persist with it, because a definite figure can be reached by this method, a figure not incompatible with criteria for age already discussed. We therefore shall examine the three factors above enumerated, which are not without interest in themselves.

Nelson's estimate of the total population was simply obtained, because he dealt with a permanent village-site. In Tierra del Fuego, however, no site was occupied for more than a brief period at a time, so the population of any camp or even the portion of the year it was occupied cannot be exactly determined. Yet, although the Yahgan were rovers, they wandered in rather fixed limits, hence the number of inhabitants for an area might be calculated in relation to the food supply.

Nelson assumed that each Californian family consists of six individuals. This number might be thought too large for the

[1] *Geographical Journal*, pp. 65–66, London, 1830.

[2] Shellmounds of the San Francisco Bay region; *Univ. Calif. Pub. Amer. Archaeol. and Ethnol.*, VII, no. 4, p. 345.

3: Lothrop E-5 (1924-1925) 1928
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In view of these figures and the other criteria for age already adduced, it seems not unwarranted to believe that the south coast of Tierra del Fuego has been occupied for 2000 years at least.

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PART III

COMPARISONS AND CONCLUSIONS

ORIGIN OF THE FUEGIANS

174 THE origin of the tribes of Tierra del Fuego is obscured in the mists of the past, but study of their physical type, their language, and their cultural development make it possible to trace them far to the north. Evidence of all kinds blends in agreement that the Yahgan and Alacaluf, the Canoe Indians, came down the west coast of South America, where the remains of their ancestors or relatives can be identified at least as far north as Peru. Furthermore, the Foot Indians, Ona and Haush, clearly are connected directly with the inhabitants of Patagonia and perhaps with the tribes of the Chaco and the Amazon valley. The evidence on which these conclusions rest we shall examine in detail.

1. SOMATOLOGICAL EVIDENCE.—Along the west coast of South America a short-statured, dolichocephalic strain repeatedly has been discovered under conditions indicating great antiquity. These people, if not the direct ancestors, may well have been collateral relatives of the Canoe Indians of Tierra del Fuego and Patagonia Occidental. This physical type, for reasons too complex for discussion here,[1] is now regarded by discreet and cautious students as the most ancient human strain in the New World. The anthropometry of the Yahgan, herein discussed, indicates that, while they may basically belong to this physical group, they have acquired a short-statured and brachycephalic mixture, generally regarded as the second type to reach the Western Hemisphere. Somatological evidence indicates then that the Yahgan are a cross of the two most ancient types of man in the New World.

The Ona, on the other hand, mesocephalic like the Yahgan, but exceedingly tall, appear to be a cross of two tall strains and of varied head forms. The dolichocephalic factor in this tribe may be

[1] This subject has been covered by Dixon (1923), and by Hrdlička in *Proc. Amer. Philos. Soc.*, LXV, pp. 157–160.

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

of the early variety correlated with short stature, but proof is wanting. At any rate it seems obvious that relationship exists between the Ona and the Tehuelche, legendary giants of Patagonia. To be sure, the modern Tehuelche are brachycephalic, but their heads may be shortened by deformation and the use of a cradle-board, for ancient skulls from Patagonia are mesocephalic or even dolichocephalic.

2. LINGUISTIC EVIDENCE.—Connection between either the Yahgan or Alacaluf tongue and any other linguistic group has not been demonstrated. Ona and Haush are clearly related to each other and to the Tehuelche of Patagonia, thus forming a linguistic family.

3. CULTURE EVIDENCE.—For the Canoe Indians of Tierra del Fuego we have a well-developed cultural chain leading northward along the west coast of South America. From the Yahgan culture to the Alacaluf, and from the Alacaluf to the Chono, more than 600 miles north of the Straits of Magellan, there is but little change in material equipment or manner of life. From Chiloe island far northward archeological remains underlying those of the historic tribes of the coast may be attributed to the ancestors or collateral relatives of the Fuegians. Skeletal remains of the early shellheap culture are dolichocephalic and short of stature, and so belong to the principal strain of the Canoe Indians. Material culture of the coast north of the Chilean islands cannot closely resemble that of Fuegia, for the climate and character of the country rapidly change from moist woodlands to arid desert; yet, as we have already pointed out (pp. 193–194), significant parallels exist. To these we may add that in the balsa with high pointed ends, typical of the desert coast, we have a possible prototype for the Fuegian canoe, shaped like the new moon. On the Atlantic coast of South America there are no sea-going canoe Indians south of the equator.

The Foot Indians, Ona and Haush, we have shown to be linguistically allied with the Tehuelche of Patagonia. Physical resemblance between the tall Tehuelche and Ona tribes is striking. Among cultural features found in common we may list the skin robe, skin petticoat, man's bag, moccasin type, house type, transversely hafted scraper, skin water-bag, use of fungus for tinder, tattooing, bow and arrow, etc. Clearly this evidence indicates that the three tribes lived together on the Patagonian plateau long enough to develop a typical culture in common. A further proof

3: Lothrop E-5 (1924-1925) 1928
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that the Ona once dwelt in Patagonia, according to Mr. William Bridges, is that they have a legend concerning a large flightless bird, which obviously refers to an ostrich, or rhea, found in Patagonia but not in Tierra del Fuego.

We can trace them with reasonable certainty the Foot Indians of Tierra del Fuego to the Patagonian plains, but to say when and whence they came to Patagonia is a difficult problem, to solve which but slender evidence exists. I am inclined to see relationship with the tribes of the Chaco and the upper Amazon valley. This relationship is probably rather with an earlier population than with the historic peoples. Mysterious remnants of these earlier settlers exist in the upper Amazon valley. Apparently they are held by the dominant population in a position intermediate between slaves and pet animals. Little is known of their manner of life, except that they are nomadic hunters using the bow and arrow but having no canoes or houses. If a list of culture parallels between the Amazon tribes and Fuegian Foot Indians be made, the features in common, it will be found, with but few exceptions are those we shall show presently to be basic to all Indian culture. It therefore follows that no exact deductions can be made from existing data, chiefly characterized by the primitive state of all the peoples involved. We find exceedingly significant, however, the parallel development of masked dances and initiation in each region, a similarity already indicated (page 95).

6. 4. Chronological Evidence.—One can but wonder when and how the natives reached Tierra del Fuego. The first-comers doubtless were the Yahgan, for we have advanced positive evidence that they had occupied their historic territory for somewhere around twenty centuries. Next to arrive in all probability were the Alacaluf, unless it is thought that the Yahgan, to reach southern Fuegia, pushed through the Alacaluf country after its occupancy. Beauvoir (1915) records a tradition among the Ona that they reached Tierra del Fuego by a land bridge, but afterward a cataclysm formed the Straits of Magellan and isolated them. This tale will hardly bear the scrutiny of geological opinion, and so we are forced to the conclusion that the Foot Indians were ferried across—by the Alacaluf presumably, because they had canoes capable of carrying fifteen or twenty people, while the Yahgan had only small ones.

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6

This sequence of settlement is based on the theory that the Foot Indians could not and did not carry themselves across the straits. To be sure, the Tehuelche stuffed their hide *toldos* with saplings and made rude coracles like the bull-boats of North America.[1] In these, with numerous wettings and considerable peril, they crossed the Patagonian rivers. But by no stretch of the imagination could the storm-vexed tide-ripped waters of Magellan strait be navigated successfully in such flimsy craft.

Mr. William Bridges assured me that neither the Ona nor the Haush, to the best of his knowledge, had ever used a boat. In the summer of 1907 certain Indians were taken to Navarin island to tend sheep, and displayed great apprehension upon the waters of Beagle channel. No Ona could swim, and this tribe crossed swift rivers by forming a huddle so that any individual who stumbled would not fall and be drowned. Lacking all knowledge of navigation, unable to swim a stroke, and inherently afraid of deep water, how could the Foot Indians have crossed to Tierra del Fuego without the aid of others?

Of the Foot Indians, evidently the Haush came first. This is indicated by their geographical location in the southeastern corner of the island, and is corroborated by the existence of place-names of Haush derivation in territory occupied in recent times by the Ona.

The linguistic diversity of the Haush, Ona, and Tehuelche implies separation into distinct groups a very long time ago, because language in that part of the world is known to be exceedingly stable and slow to change. Thus Lista[2] significantly points out that the tongue of Patagonia has undergone little change since Pigafetta, the historian of Magellan, collected a vocabulary in 1520. Similarly Cooper (1917, p. 28) remarks that the Alacaluf vocabulary made by La Guilbaudière not later than 1696 indicates linguistic stability since that date.

We have no archeological indication of when the Foot Indians reached Tierra del Fuego. Yet no aspect of Ona culture implies separation from the Patagonia mainland by more than a few centuries before the voyage of Magellan.

[1] Bourne, 1853, pp. 132–134.

[2] 1880, p. 116. Comparative vocabularies of Pigafetta (1520), Viedma (1781), d'Orbigny, Musters, and Lista, while not identical, are closely similar.